## WHAT IS CLAIMED IS:

- 1. An article for the determination of dehydration in a human comprising a compact, portable, hand-held device having an elongated member, said member being comprised of:
  - (a) at a first portion thereof, a zone containing at least one chemical reagent, which when contacted with a specimen of human urine exhibits a different, specific color corresponding to whether the specific gravity of urine is within the individual ranges of:
    - (i) less than about 1.015,
    - (ii) between about 1.105 and about 1.025,
    - (iii) greater than about 1.025
- (b) affixed at a second portion thereof, or alternatively on a handle, cap or cover of the article, a zone of predetermined separate colors, each of which color is indicative of an individual specific gravity range and therefore the hydration status of said human, and wherein the device is so configured that a person can hold the device and urinated directly onto the first portion thereof without urine contacting the remainder of the device and wherein a color change of the chemical reagent produced by contact with the urine can immediately and privately be compared with the colors affixed to the second portion, or alternatively on the handle, cap or cover of the article.
- 2. The device of claim 1 wherein the elongated member is in the shape of a dipstick.
- 3. The device of claim 1 wherein the elongated member is composed at least in part of plastic.
- 4. The device of claim 1 wherein the elongated member is composed entirely

of plastic.

- 5. The device of claim 1 wherein the elongated member is composed of polyethylene plastic.
- 6. The device of claim 1 wherein the elongated member is composed of polypropylene plastic.
- 7. The device of claim 1 wherein the elongated member is approximately the size of a medical tongue depressor.
- 8. The device of claim 1 wherein the chemical indicator zone is comprised of a mixture of chemicals, which, when contacted with urine, will produce different colors corresponding to the specific gravity of a particular urine specimen.
- 9. The device of claim 5 wherein the chemical indicator when contacted with urine exhibits a green color for a urine specific gravity of less than about 1.015; a speckled green-yellow color for a urine specific gravity of between about 1.015 and about 1.025; and a yellow color for urine specific gravity of greater than about 1.025.
- 10. The device of claim 9 wherein the chemical indicator is a mixture of bromthymol blue, poly(methylvinyl ether/ maleic anhydride) and sodium hydroxide.
- 11. The device of claim 10 wherein the chemical indicator is a mixture of:
  - (a) about 2.8 weight percent of bromthymol blue
  - (b) about 68.8 weight percent of poly(methyvinyl ether /maleic anhydride)
  - © about 28.4 weight percent of sodium hydroxide.
- 12. The device of claim 9 wherein the same colors are set forth on at least one of the cap, cover or the second portion of the device with a designation of the specific gravity for each color.
- 13. The device of claim 9 wherein the same colors are set forth on the second portion thereof with a designation of normal hydration for green, moderate hydration for the speckled green-yellow and dehydration for the yellow color.

- 14. The device of claim 9 wherein under each color both the specific gravity and the hydration designations are indicated.
- 15. The device of claim 1 which is encapsulated with a removable and environmentally disposable moisture proof covering.
- 16. The device of claim15 wherein the moisture proof covering is composed of plastic.
- 17. The device of claim 15 wherein the moisture proof covering is composed of foil.
- 18. The device of claim 17 wherein the foil is aluminum.
- 19. A process for the self-determination of the hydration state of a human which comprises said human in private urinating directly onto the first portion of the device of claim 1 and comparing the color change produced by the contact of the chemical substrate with urine, with the colors indicated on the cap, cover or second portion of said device.
- 20. The process of claim 19 wherein the human is one engaged in athletic activities.